Complete Summary

GUIDELINE TITLE

Rhinitis.

BIBLIOGRAPHIC SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Rhinitis. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 May. 34 p. [86 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Rhinitis

- Allergic rhinitis
- Nonallergic rhinitis

GUIDELINE CATEGORY

Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Allergy and Immunology
Family Practice
Internal Medicine

Otolaryngology
Pediatrics

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To increase the use of prophylactic medications for patients with seasonal allergic rhinitis
- To decrease the use of injectable corticosteroid therapy for patients with allergic rhinitis

TARGET POPULATION

Patients 5 to 65 years of age who have symptoms of rhinitis

INTERVENTIONS AND PRACTICES CONSIDERED

Allergic Rhinitis

Diagnosis

1. History and physical examination
2. Diagnostic tests, including skin testing, radioallergosorbent testing (RAST), and nasal smear for eosinophils

Peripheral blood eosinophil count, total serum immunoglobulin E (IgE) level, Rinkel method of skin titration and sublingual provocation testing are considered but not recommended.

Treatment

1. Symptomatic treatment:
    - Allergen avoidance activities
    - Medication therapy (antihistamines, decongestants, cromolyn sodium, topical corticosteroids, anticholinergics, and leukotriene receptor blockers)
2. Referral to a specialty provider for allergen skin testing, immunotherapy, complete nasal examination (rhinoscopy)
3. Patient education and follow-up

Nonallergic Rhinitis

Diagnosis

History and physical examination

Treatment

1. Symptomatic treatment
    - Nasal obstruction: Azelastine hydrochloride nasal spray, intranasal corticosteroid spray, oral decongestant
    - Non-purulent chronic posterior nasal drainage:
        - Conservative treatment, such as increased water intake, decreased caffeine and alcohol intake, nasal saline irrigation
        - Medical treatment, such as intranasal corticosteroids
    - Bilateral chronic anterior rhinorrhea: Avoidance of offending irritants, intranasal corticosteroids, Atrovent spray, nasal saline
2. Referral to a specialty provider for radiologic examination (coronal computerized tomography) and surgery.
3. Patient education and follow-up

MAJOR OUTCOMES CONSIDERED

- Sensitivity and specificity of diagnostic tests
- Effectiveness of therapy in reducing symptoms
- Side effects of treatment

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

No additional description of literature search strategies is available.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Institute Partners: System-Wide Review

The guideline draft, discussion, and measurement specification documents undergo thorough review. Written comments are solicited from clinical, measurement, and management experts from within the member medical groups during an eight-week period of "Critical Review."

Each of the Institute's participating medical groups determines its own process for distributing the guideline and obtaining feedback. Clinicians are asked to suggest modifications based on their understanding of the clinical literature coupled with their clinical expertise. Representatives from all departments involved in implementation and measurement review the guideline to determine its operational impact. Measurement specifications for selected measures are developed by the Institute for Clinical Systems Improvement (ICSI) in collaboration with participating medical groups following general implementation of the guideline. The specifications suggest approaches to operationalizing the measure.

Guideline Work Group: Second Draft

Following the completion of the "Critical Review" period, the guideline work group meets 1-2 times to review the input received. The original guideline is revised as necessary and a written response is prepared to address each of the suggestions received from medical groups. Two members of the Respiratory Steering Committee carefully review the Critical Review input, the work group responses, and the revised draft of the guideline. They report to the entire committee their assessment of two questions: (1) Have the concerns of the medical groups been

adequately addressed? (2) Are the medical groups willing and able to implement the guideline? The committee then either approves the guideline for pilot testing as submitted or negotiates changes with the work group representative present at the meeting.

Pilot Test

Medical groups introduce the guideline at pilot sites, providing training to the clinical staff and incorporating it into the organization's scheduling, computer, and other practice systems. Evaluation and assessment occurs throughout the pilot test phase, which usually lasts for three months. Comments and suggestions are solicited in the same manner as used during the "Critical Review" phase.

The guideline work group meets to review the pilot sites' experiences and makes the necessary revisions to the guideline, and the Respiratory Steering Committee reviews the revised guideline and approves it for implementation.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The recommendations for the management of rhinitis are presented in the form of two algorithms, comprised of 15 components, and accompanied by detailed annotations. One algorithm is provided for Allergic Rhinitis and a second for Nonallergic Rhinitis. Clinical highlights and selected annotations (numbered to correspond with the algorithm) follow.

Class of evidence (A-D, M, R, X) ratings are defined at the end of the "Major Recommendations" field.

Clinical Highlights

1. Triage patients through the Institute for Clinical Systems Improvement guideline Viral Upper Respiratory Infection in Adults and Children. (Annotation 1)
2. Treat patients diagnosed as having allergic seasonal rhinitis with prophylactic medications (antihistamines and/or intranasal corticosteroids). (Annotation 7)
3. Prescribe intranasal corticosteroids to control allergic rhinitis symptoms. (Annotation 7)
4. Educate patients with allergic rhinitis about avoidance activities. (Annotation 9)
5. Reserve immunotherapy for patients with allergic rhinitis for whom optimal avoidance measures and medication therapy are insufficient to control symptoms. (Annotation 10)
6. Refer patients to specialty providers when symptoms suggest a structural etiology, diagnosis is uncertain, there is a poor response to empiric therapy, or the diagnosis needs confirmation before expensive or inconvenient avoidance measures are instituted. (Annotation 10)

Allergic Rhinitis Algorithm Annotations

1. Patient Has Been Triaged Through the Institute for Clinical Systems Improvement guideline Viral Upper Respiratory Infection in Adults and Children and Has Symptoms of Rhinitis

   Rhinitis is defined as inflammation of the membranes lining the nose, and is characterized by nasal congestion, rhinorrhea, sneezing, and itching of the nose and/or postnasal drainage.

   Patients presenting with these symptoms should be triaged through the Institute for Clinical Symptoms Improvement (ICSI) guideline Viral Upper Respiratory Infection in Adults and Children. Symptom complexes and relevant diagnoses are reviewed in Table I and Algorithm Annotations #3 and #7 of that guideline.

2. History/Physical Examination

   The following points in the history and physical are relevant to rhinitis:

   A. History

      History of Present Illness

      - Congestion or obstruction
      - Rhinorrhea (anterior nasal discharge)
      - Pruritus of nose or eyes
      - Sneezing
      - Posterior nasal discharge with or without cough
      - Sinus pressure/pain
      - Snoring
      - Episodic or seasonal or perennial symptoms; consider specific triggers*
      - Pregnancy
      - Current medications such as topical decongestants, hormones, antihypertensives, antibiotics
      - Age of onset of symptoms
      - Current and previous treatments for rhinitis

      Past Medical History

      - History of trauma or facial/sinus surgery
      - Relevant medical conditions: asthma, dermatitis, chronic sinusitis, chronic or recurrent otitis media
      - History of polyps and aspirin (ASA)/nonsteroidal anti-inflammatory drug (NSAID) sensitivity

      Family History

      - Asthma
      - Rhinitis
      - Atopic dermatitis

Social and Environmental History

- Occupational exposures*
- Home exposures*
- Active and passive smoking exposures
- School exposures
- Illicit drug exposures

*Refer to Appendix A in the original guideline document for a list of "Rhinitis Triggers"

B. Physical Examination
    1. Nose
        - Swollen nasal turbinates (may be boggy, bluish or pale, hyperemic or purplish red); note size and color
        - Clear, cloudy, or colored rhinorrhea
        - Nasal septal deviation or structural abnormality
        - Nasal polyps
        - Nasal crease or "salute"
        - Sneezing
        - Mouth breathing
        - Unilateral obstruction
        - Foreign body
    2. Eyes
        - Conjunctivitis
        - Allergic "shiners" (dark circles under the eyes from venous stasis)
        - Dennie's lines (lower eyelid creases)
        - Periorbital edema
    3. Ears
        - Acute otitis media or otitis media with effusion (suggesting associated eustachian tube dysfunction)
    4. Lungs
        - Wheezing or prolonged expiratory phase (suggesting associated asthma)
    5. Skin
        - Atopic dermatitis

Evidence supporting this recommendation is of class: R

3. Signs/Symptoms Suggest Structural Etiology?

Malignant tumors of the nose and sinuses can be difficult to detect. Recent onset of pain, decreased sensation of the face, palate, or teeth, decreased sense of smell, bleeding, facial swelling, and/or nasal obstruction may all be signs of a nasal or sinus cancer.

Structural abnormalities most often present with symptoms of obstruction. Deviated nasal septum, deformity of nasal bones, nasal turbinates, or nasal cartilage may be detected on physical examination and may cause significant obstruction. Nasal polyps and adenoidal hypertrophy can cause obstruction.

Unilateral nasal obstruction is often indicative of a structural or extrinsic source of nasal obstruction. The most common cause of chronic unilateral nasal obstruction in an adult is a deviated septum; however, nasal tumors such as inverting papilloma and carcinomas must be ruled out. In the pediatric population, unilateral nasal obstruction and/or rhinorrhea require that an intranasal foreign body be ruled out.

Juvenile angiofibroma is a benign vascular tumor found in adolescent males. It may present with nasal obstruction or epistaxis and can cause torrential nose bleeds.

Another structural defect resulting from trauma that should be considered is a cribriform plate defect that can result in cerebral spinal fluid rhinorrhea.

Suspicion of one of these abnormalities requires a complete nasal examination including visualization of the posterior nasopharynx.

5. Signs/Symptoms Suggest an Allergic Etiology?

Signs and symptoms suggestive of an allergic etiology include:

- Pruritus of the eyes, nose, palate, ears
- Watery rhinorrhea
- Sneezing
- Seasonal symptoms
- Family history of allergies
- Sensitivity to specific allergens, especially dust, animals, pollen and mold
- Coexistent asthma or eczema

Signs and symptoms suggestive of nonallergic rhinitis include:

- Sensitivity to smoke, perfume, weather changes, and environmental irritants
- History of previous negative allergy testing
- Overuse of topical decongestants
- Adult onset of symptoms
- Nasal crusting or drying
- Facial pain

Signs and symptoms suggestive of either or both include:

- Perennial symptoms
- Episodic symptoms
- Nasal congestion
- History of frequent sinus infections/chronic sinusitis

7. Consider Diagnostic Testing; Initiate Symptomatic Treatment
   A. Diagnostic Testing

The clinician may choose to conduct diagnostic testing at this point if the results would change management. The following are recommended:

- Skin tests and radioallergosorbent test (RAST): Skin tests and RAST identify the presence of immunoglobulin E (IgE) antibody to a specific allergen. There are two major reasons to consider allergy testing: (1) to differentiate allergic from nonallergic rhinitis, and (2) to identify specific allergens causing allergic rhinitis. A limited panel of 2 to 4 RASTs should be considered. If a greater number of specific allergens are to be identified, skin tests are the preferred diagnostic tests. Skin tests are faster, more sensitive, and more cost effective. Skin tests require experience in application and interpretation, and carry the risk of anaphylactic reactions. Therefore, only specially trained physicians should perform them. The precise sensitivity of specific IgE immunoassays such as RAST compared with prick/puncture skins tests has been reported to range from <50% to >90% with the average being about 70 to 75% for most studies. Therefore, skin tests are presently the preferred test for the diagnosing of IgE-mediated sensitivity.
- Nasal smear for eosinophils: Nasal smear may be a low cost screening tool to detect eosinophils. While eosinophils may be present in both allergic and nonallergic rhinitis, eosinophila predicts a good response to topical nasal corticosteroid medication. This test must be done during the actual symptomatic period to yield interpretable results.
- A peripheral blood eosinophil count, total serum IgE level, Rinkel method of skin titration, and sublingual provocation testing are not recommended.

Evidence supporting this recommendation is of classes: B, C, D, R, X

B. Symptomatic Treatment: If the clinical diagnosis is obvious, symptomatic treatment should be initiated. Symptomatic treatment includes both education on avoidance and medication therapy.
    1. Avoidance Activities: Identifying avoidable allergens by skin test or RAST will enhance a patient's motivation to practice avoidance. Some avoidance activities require significant financial investment or substantial lifestyle changes by the patient. Before recommending such measures, it may be useful to recommend skin testing or limited RAST testing to confirm the diagnosis and identify the specific allergen.
        a. House Dust Mites: House dust mites are major allergens found in the house in carpets, mattresses, bedding, pillows, upholstered furniture, stuffed animals, and clothing (especially children's clothing). They thrive on human epithelial scales.

           Essential changes to reduce mite exposure include:

- Encase the mattress and box springs in an allergen-impermeable cover.
- Encase the pillow in an allergen-impermeable cover or wash it weekly.
- Wash the sheets and blankets on the patient's bed weekly in hot water. A temperature of ≥130 degrees F is necessary for killing house-dust mites.

The following measure minimizes exposure to dust mites and is desirable:

Reduce indoor humidity to less than 50%. (An air conditioner will reduce indoor humidity in the summer.)

b. Pets:
   - Remove animals from the house.
   - If the pet cannot be removed, a compromise to at least remove it from the bedroom can often be secured. Weekly washing of the pet may reduce allergens, but the usefulness of this practice remains controversial.

c. Indoor molds:
   - Basements tend to have higher humidity levels and therefore have higher mold growth.
   - Reduce indoor humidity to <50%.
   - Remove sites for mold growth.
   - Clean with fungicides.

d. Outdoor Pollens and Molds:
   - Remain indoors on specific days when pollen counts are high.
   - Keep doors and windows closed in the home and in automobiles.
   - Air conditioning is recommended.

e. In general:
   - Minimize contact with irritants such as cigarette smoke, perfumes, cosmetics, hair spray, and various other odors.
   - Discourage smoking by family members and visitors.

Evidence supporting this recommendation are of classes: A, C, D, R

2. Medication Therapy: See the table in the original guideline document for information to assist in the selection of appropriate medical therapy for patients with allergic rhinitis.

With the exception of systemic steroids, intranasal corticosteroids are the most effective single agents for controlling the spectrum of allergic rhinitis symptoms and

should be considered as first line therapy in patients with moderate to severe symptoms. Oral antihistamines are an effective alternative in patients who cannot use or prefer not to use intranasal corticosteroids. They can also be added to intranasal corticosteroids as an adjunctive agent. Some patients and physicians prefer to use antihistamines or antihistamine/decongestant combinations to treat mild or episodic disease, particularly when rapid onset of symptom relief is desired. Second generation antihistamines are less sedating and cause less central nervous system impairment because they do not cross the blood brain barrier well. Topical cromolyn is less effective than intranasal corticosteroids. Decongestants, anticholinergics, and eye drops are effective for targeted symptoms and can be used in combination with the above medications. In several studies, anti-leukotriene drugs have been proven as effective as second-generation antihistamines for treating symptoms of allergic rhinitis. They may not be as helpful as intranasal corticosteroids. Anti-leukotriene drugs are also helpful for coexisting bronchial asthma.

Oral steroids should be reserved for refractory or severe cases only. Injectable steroids are not generally recommended. As with the chronic use of any medications, special consideration or risk benefit may need to be given to elderly, fragile patients, pregnant women, athletes, and children. Refer to Annotation Appendix B in the original guideline for detailed information on medication for rhinitis.

Evidence supporting this recommendation is of classes: A, C, D, M, R

9. Patient Education; Follow-up as Appropriate

If the patient has adequate relief of rhinitis and associated allergic symptoms either by instituting avoidance measures or through a medication trial, appropriate follow-up should include:

1. Further education and review of information about avoidance activities
2. Education and review of appropriate use of medications and possible side-effects
3. Advice to anticipate unavoidable exposure to known allergens by beginning use of medications prior to exposure. For example, taking oral antihistamines prior to visiting a home with a cat or dog if sensitive to their dander can prevent symptoms. Starting intranasal corticosteroids 1 to 2 weeks prior to the start of the ragweed pollen season will maximize benefits of the medication in people with seasonal allergic rhinitis symptoms in the late summer.

Adequate follow-up may require a separate provider visit or a follow-up phone call or may be accomplished during another clinic visit. Use of appropriate educational handouts and materials may be helpful.

10. Consider: Further Diagnostic Testing; Referral to a Specialty Provider; Diagnosis of Nonallergic Rhinitis

When the patient has not experienced relief of symptoms within 2 to 4 weeks of adequate therapy, the provider should:

- Review obstacles to compliance with current medication and discuss avoidance measures.
- Consider a trial of another medication or add another agent for targeted symptoms (see original guideline for a list of conservative, non-medical, treatments of rhinitis. Also see Appendix B of the original guideline document for a list of medications for rhinitis).
- Consider allergen skin testing by a qualified physician. If there are positive skin tests to allergens which correlate with the patient's timing of symptoms, immunotherapy may be considered.
- Consider complete nasal examination (rhinoscopy) by a qualified individual to rule out a mass or lesion, particularly if obstruction and congestion are the major symptoms.
- Consider diagnosis of nonallergic rhinitis.

If the patient does not respond to medical treatment, a complete examination of the ears, nose, and throat is indicated to rule out structural and extrinsic sources of obstruction and drainage. Allergy evaluation should be performed. This examination should include visualization of the entire nasal septum, inferior and middle nasal turbinates, and possibly the middle meatus, and visualization of the nasopharynx. A topical decongestant spray may be used to shrink nasal tissues and allow better visualization of nasal structures. Endoscopic nasal and nasopharyngeal examination may be required.

Immunotherapy:

Immunotherapy is a series of subcutaneous injections of extracts of allergenic materials in an attempt to decrease the severity of allergic symptoms that may occur upon future exposure to the allergen. It consists of weekly incremental doses usually over 4 to 6 months, followed by maintenance injections of the tolerated maximum dose every 2 to 4 weeks. If successful, this treatment regimen is normally carried on for 3 to 5 years. Immunotherapy should be generally reserved for patients with significant allergic rhinitis for whom avoidance measures and pharmacotherapy are insufficient to control symptoms. Other candidates for immunotherapy include patients who have experienced side effects from medication or who cannot comply with a regular (or prescribed) pharmacotherapy regimen or who develop complications such as recurrent sinusitis.

All immunotherapy injections should be administered in a medical facility where personnel, equipment, and medications are available to treat an anaphylactic reaction to an injection. Because there is a risk of anaphylaxis with every injection during the build-up or maintenance phases of treatment, regardless of the duration of treatment, the patient should be advised to wait in the physician's office or clinic for 30 minutes after the injection.

12. Initiate Symptomatic Treatment

1. Treatment of symptomatic nasal obstruction due to nonallergic rhinitis includes:
    - Azelastine Hydrochloride nasal spray
    - Intranasal corticosteroid spray
    - Oral decongestant

    Chronic nasal obstructive symptoms secondary to nonallergic rhinitis can be managed with intranasal steroid sprays, oral decongestants, or a combination of the two.

2. Treatment of symptomatic non-purulent chronic posterior nasal drainage (post nasal drip) includes the following:

    Conservative Treatment

    - Increase water intake
    - Decrease caffeine and alcohol intake (both have a diuretic effect)
    - Nasal saline irrigation
    - Determine whether the patient is using any medications that may cause oral or nasal dryness
    - Vaseline or antibiotic ointment may be used for nasal crusting
    - Add humidity in bedroom if significantly less than 50%

    Medical treatment

    - Intranasal corticosteroids
3. Treatment of symptomatic bilateral chronic anterior rhinorrhea due to nonallergic rhinitis includes:
    - Avoidance of offending irritants such as smoke and perfume
    - Intranasal corticosteroids
    - Atrovent spray
    - Nasal saline

14. Consider Referral to Specialty Provider

If chronic sinusitis remains in the differential diagnosis, antibiotic therapy should be instituted prior to radiologic examination.

Coronal computed tomography (CT) scans are used rather than plain sinus films mainly because plain sinus films do not adequately delineate intranasal and sinus anatomy. Plain films rarely adequately visualize the ethmoid sinuses, which are the sinuses most commonly involved in chronic sinusitis. Also, at this stage of the protocol, medical treatment has already failed, so if surgery is indicated for chronic sinusitis, etc., a coronal CT will be needed prior to surgery.

The practitioner may consider allergy as a possible cause of symptoms.

Definitions:

Classes of Research Reports

A. Primary Reports of New Data Collection

Class A

- Randomized, controlled trial

Class B

- Cohort study

Class C

- Non-randomized trial with concurrent or historical controls
- Case-control study (except as above)
- Study of sensitivity and specificity of a diagnostic test
- Population-based descriptive study

Class D

- Cross-sectional study
- Case series
- Case report

B. Reports that Synthesize or Reflect upon Collections of Primary Reports

Class M

- Meta-analysis
- Systematic review
- Decision analysis
- Cost-effectiveness analysis

Class R

- Consensus statement
- Consensus report
- Narrative review

Class X

- Medical opinion

CLINICAL ALGORITHM(S)

Detailed and annotated clinical algorithms are provided for:

- Allergic Rhinitis
- Nonallergic Rhinitis

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The guideline contains an annotated bibliography and discussion of the evidence supporting each recommendation. The type of supporting evidence is classified for selected recommendations (See "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Following the guideline recommendation may:

- Improve the management of patients with rhinitis
- Improve symptom relief and control

POTENTIAL HARMS

Potential Side Effects of the Medications for Rhinitis (see Appendix B in the original guideline document for details)

- Corticosteroids. The most common side effects of intranasal corticosteroids are nasal irritations (dryness, burning, and crusting) and mild epistaxis. Nasal septal perforation has been reported. The likelihood of these side effects can be decreased by use of proper technique of administration. Nasal mucosal atrophy and clinically significant suppression of the adrenal axis have not been demonstrated either in adults or children. However, the U.S. Food and Drug Administration (FDA) reviewed data that suggested growth may be temporarily slowed in children. This issue remains under study and care should be used in prolonged use of these medications.
- Antihistamines. Common side effects of the first-generation antihistamines include somnolence, diminished alertness, and anticholinergic effects such as dry mouth, blurred vision, and urinary retention. Evidence supports that first generation antihistamines cause central nervous system impairment even in the absence of overt symptoms. Some reports indicate that first-generation antihistamines clearly impair driving performances. The second-generation antihistamines are less sedating and cause less central nervous system impairment because they do not cross the blood brain barrier well. Cetirizine, fexofenadine and loratadine have not been shown to have this association.
- Decongestants. Adverse effects include irritability, tremor, insomnia, tachycardia, and hypertension.
- Cromolyn. Adverse effects are minimal and include nasal irritation, sneezing, and unpleasant taste. The four times daily dosing can cause compliance problems.
- Anticholinergics. Most frequent side effects include epistaxis, blood-tinged mucus, and nasal dryness. Other possible side effects include dry mouth and throat, dizziness, ocular irritation, blurred vision, precipitation or worsening of narrow angle glaucoma, urinary retention, prostatic disorders, tachycardia, constipation, and bowel obstruction.

- Ophthalmic Medications. Side effects of ophthalmic medications (except corticosteroids) are generally mild and include a brief stinging, burning sensation.

Potential Side Effects of the Medications for Nonallergic Rhinitis

- Oral Decongestants. The use of oral decongestants may cause central nervous system stimulation, hypertension, and cardiac arrhythmias. Patients using oral decongestants should be monitored for side effects, particularly hypertension.
- Intranasal corticosteroid spray. Side effects seem to be related to application of the spray and are usually limited to intranasal dryness, crusting, and bleeding. Documented systemic side effects are rare.
- Topical Antihistamines. Side effects include drowsiness and bitter taste.

CONTRAINDICATIONS

CONTRAINDICATIONS

Antihistamines are contraindicated for patients with recurrent or chronic sinusitis as they may cause ciliary paresis and drying of secretions, thereby impairing sinus drainage.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- These clinical guidelines are designed to assist clinicians by providing an analytical framework for the valuation and treatment of patients, and are not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. A guideline will rarely establish the only approach to a problem.
- This clinical guideline should not be construed as medical advice or medical opinion related to any specific facts or circumstances. Patients are urged to consult a health care professional regarding their own situation and any specific medical questions they may have.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Once a guideline is approved for general implementation, a medical group can choose to concentrate on the implementation of that guideline. When four or more groups choose the same guideline to implement and they wish to collaborate with others, they may form an action group.

In the action group, each medical group sets specific goals they plan to achieve in improving patient care based on the particular guideline(s). Each medical group shares its experiences and supporting measurement results within the action group. This sharing facilitates a collaborative learning environment. Action group

learnings are also documented and shared with interested medical groups within the collaborative.

Currently, action groups may focus on one guideline or a set of guidelines such as hypertension, lipid treatment, and tobacco cessation.

The following detailed measurement strategies are presented to help close the gap between clinical practice and the guideline recommendations.

Priority Aims for Medical Groups When Using This Guideline

1. Increase the use of prophylactic medications for patients with seasonal allergic rhinitis

   Possible measures of accomplishing this aim:

   a. Percentage of patients with seasonal allergic rhinitis prescribed prophylactic medication.
2. Decrease use of injectable corticosteroid therapy for patients with allergic rhinitis

   Possible measures of accomplishing this aim:

   a. Percentage of patients with allergic rhinitis being treated with injectable corticosteroids.

Possible Success Measure #1a

Percentage of patients with seasonal allergic rhinitis prescribed prophylactic medication.

Population Definition

Patients age 5 to 65 with a diagnosis of allergic rhinitis with annually recurring symptoms.

Data of Interest

Number of people with a prescription of intranasal corticosteroid or antihistamine and documentation of patient education to begin treatment 1-2 weeks prior to the anticipated start of symptoms
Number of people with a diagnosis of allergic rhinitis, with seasonal symptoms

Numerator/Denominator Definitions

Numerator:
Patients with prescription of intranasal corticosteroids: Nasonex, Flonase, Nasalide, Nasacort aerosol, Nasacort AQ, and Rhinocort AQ

or

Prescription of antihistamine (oral or nasal):

Nasal: Azelastine

Oral: Dimetane, Chlor-Trimeton, Tavist, Periactin, Benadryl, Atarax, Vistaril, PBZ, Zyrtec, Claritin, Allegra, Clarinex, Bromfed, Bromfed PD, Deconamine SR, Kronofed, Trinalin, Claritin D, Allegra D

AND who have documentation of education to begin treatment 1 to 2 weeks prior to the anticipated start of symptoms.

Denominator:
Patients diagnosed with allergic rhinitis.(Refer to the original guideline document for specific ICD-9 codes.) Patients presenting during the months of April through October.

Method/Source of Data Collection

Identify patients diagnosed with allergic rhinitis using the above diagnosis codes who presented during the months of April through October. Some medical groups will be able to identify the population of patients through patient computer records of ICD-9 codes.

The medical record of each patient is reviewed to determine if the rhinitis is seasonal. If the patient is determined to have seasonal allergic rhinitis, the medical record is checked for a prescription for an intranasal corticosteroid OR antihistamine AND if the patient was given instruction to begin treatment 1 to 2 weeks prior to the typical start of symptoms.

Time Frame Pertaining to Data Collection

The suggested time period is a calendar month.

Systems Approaches to Implementation for this Guideline

1. Develop, collect, and disseminate materials to educate patients with allergic rhinitis about avoidance activities.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Rhinitis. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 May. 34 p. [86 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1998 Aug (revised 2003 May)

GUIDELINE DEVELOPER(S)

Institute for Clinical Systems Improvement - Private Nonprofit Organization

GUIDELINE DEVELOPER COMMENT

Organizations participating in the Institute for Clinical Systems Improvement (ICSI): Affiliated Community Medical Centers, Allina Medical Clinic, Altru Health System, Aspen Medical Group, CentraCare, Columbia Park Medical Group, Community-University Health Care Center, Dakota Clinic, ENT SpecialtyCare, Fairview Health Services, Family HealthServices Minnesota, Family Practice Medical Center, Gateway Family Health Clinic, Gillette Children's Specialty Healthcare, Grand Itasca Clinic and Hospital, HealthEast Care System, HealthPartners Central Minnesota Clinics, HealthPartners Medical Group and Clinics, Hutchinson Area Health Care, Hutchinson Medical Center, Lakeview Clinic, Mayo Clinic, Mercy Hospital and Health Care Center, MeritCare, Minnesota Gastroenterology, Montevideo Clinic, North Clinic, North Memorial Care System, North Suburban Family Physicians, Northwest Family Physicians, Olmsted Medical Center, Park Nicollet Health Services, Pilot City Health Center, Quello Clinic, Ridgeview Medical Center, River Falls Medical Clinic, RiverWay Clinics, Saint Mary's/Duluth Clinic Health System, St. Paul Heart Clinic, Southside Community Health Services, Stillwater Medical Group, SuperiorHealth Medical Group, University of Minnesota Physicians

ICSI, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; telephone, (952) 814-7060; fax, (952) 858-9675; e-mail: icsi.info@icsi.org; Web site: www.icsi.org.

SOURCE(S) OF FUNDING

The following Minnesota health plans provide direct financial support: Blue Cross and Blue Shield of Minnesota, HealthPartners, Medica, Metropolitan Health Plan, PreferredOne, and UCare Minnesota. In-kind support is provided by the Institute for Clinical Systems Improvement's (ICSI) members.

GUIDELINE COMMITTEE

Respiratory Steering Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Work Group Members: Robert Stroebel, MD (Work Group Leader) (Mayo Clinic) (Internal Medicine); David Graft, MD (Park Nicollet Health Services) (Allergy); M. Takahashi, MD (HealthPartners Medical Group) (Allergy); Peter Marshall, PharmD (HealthPartners Health Plan) (Pharmacy); Beth Green, MBA, RRT (Institute for Clinical Systems Improvement) (Measurement Advisor); Jenelle Meyer, RN, (Institute for Clinical Systems Improvement) (Facilitator)

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

In the interest of full disclosure, Institute for Clinical Systems Improvement (ICSI) has adopted a policy of revealing relationships work group members have with companies that sell products or services that are relevant to this guideline topic. It is not assumed that these financial interests will have an adverse impact on guideline content. They simply are noted here to fully inform users of the guideline.

David Graft, MD
Lecture Honoraria - Merck, Aventis, Pfizer/UCB, Glaxo Smith Kline, Astra Zeneca
Consultant - Aventis, Wallace (MedPointe)

All other work group members: none declared

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Institute for Clinical Systems Improvement (ICSI). Rhinitis. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2001 Dec. 33 p.

The next scheduled revision will occur within 18 months.

GUIDELINE AVAILABILITY

Electronic copies: Available from the Institute for Clinical Systems Improvement (ICSI) Web site.

Print copies: Available from ICSI, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; telephone, (952) 814-7060; fax, (952) 858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Rhinitis. In: ICSI pocket guidelines. April 2003 edition. Bloomington (MN): Institute for Clinical Systems Improvement, 2003 Mar p. 224-6.
- Institute For Clinical Systems Improvement (ICSI). Viral upper respiratory infection (VURI) in adults and children. Bloomington (MN): Institute For Clinical Systems Improvement (ICSI); 2002 Dec. See the National Guideline Clearinghouse (NGC) summary.

Print copies: Available from ICSI, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; telephone, (952) 814-7060; fax, (952) 858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on April 19, 2001. The information was verified by the guideline developer as of June 28, 2001. This summary was updated by ECRI on June 19, 2002, and most recently on December 30, 2003.

COPYRIGHT STATEMENT

Date Modified: 11/8/2004


FIRSTGOV